

## QUERIES ON SQL JOINS

### 1. EQUI JOIN

A join which contains an equal to '=' operator in the joins condition.

a. Tablename1.columnname = Tablename2.columnname

```
SQL>select empno,ename,job,dname,loc from emp,dept where  
emp.deptno=dept.deptno;
```

b. Table name alias

```
SQL>select empno,ename,job,dname,loc from emp e,dept d where  
e.deptno=d.deptno;
```

c. Using clause

```
SQL>select empno,ename,job, dname,loc from emp e join dept d using  
(deptno);
```

d. On Clause

```
SQL>select empno,ename,job,dname,loc from emp e join dept d on  
(e.deptno=d.deptno);
```

### 2. NON-EQUI JOIN

A join which contains an operator other than equal to '=' in the joins condition.

```
SQL> select empno,ename,job,dname,loc from emp e,dept d where  
e.deptno > d.deptno;
```

### 3. NATURAL JOIN

Natural join compares all the common columns.

```
SQL> select empno,ename,job,dname,loc from emp natural join dept;
```

### 4. CROSS JOIN

This will give the cross product.

```
SQL> select empno,ename,job,dname,loc from emp cross join dept;
```

### 5. OUTER JOIN

Outer join gives the non-matching records along with matching records.

#### LEFT OUTER JOIN

This will display all matching records and the records which are in left hand side table those that are not in right hand side table.

EX. 1

```
SQL> select empno,ename,job,dname,loc from dept d left outer join  
emp e  
on(e.deptno=d.deptno);
```

EX. 2

```
SQL> select empno,ename,job,dname,loc from emp e left outer join  
dept d  
on(e.deptno=d.deptno);
```

#### RIGHT OUTER JOIN

This will display all matching records and the records which are in right hand side table those that are not in left hand side table.

EX. 1:

```
SQL> select empno,ename,job,dname,loc from emp e right outer join  
dept d on(e.deptno=d.deptno);
```

EX. 2:

```
SQL> select empno,ename,job,dname,loc from dept d right outer join  
emp e  
on(e.deptno=d.deptno);
```

### SELF JOIN – JOINING TABLE TO ITSELF

- Join condition is based on columns which has similar values
- Ex: empno, mgr
- Constructing a join condition on empno with mgr columns

To get employee names and their reporting manager's names

Ex:

```
SELECT E1.ENAME AS EMPLOYEE , E2.ENAME AS REPORTS_TO FROM EMP E1,  
EMP E2 WHERE E1.MGR=E2.EMPNO;
```

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### FULL OUTER JOIN

GETTING DATA OF MATCHING ROWS AND NON-MATCHING ROWS FROM  
BOTH TABLES

Ex:

```
select empno,ename,job,dname,loc from emp e left outer join dept d
```

```
on(e.deptno=d.deptno)
```

UNION

```
select empno,ename,job,dname,loc from emp e right outer join dept d
```

```
on(e.deptno=d.deptno);
```